Application No: 10578614   Version No: 2.1

Input Set:

Output Set:

Started: 2007-12-20 17:54:33.931
Finished: 2007-12-20 17:54:35.676
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 745 ms
Total Warnings: 38
Total Errors: 0
No. of SeqIDs Defined: 47
Actual SeqID Count: 47

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29)

```
        Input Set:


        Output Set:



          Started:   2007-12-20 17:54:33.931
         Finished:   2007-12-20 17:54:35.676
          Elapsed:   0 hr(s) 0 min(s) 1 sec(s) 745 ms
   Total Warnings:   38
     Total Errors:   0
No. of SeqIDs Defined:   47
 Actual SeqID Count:   47
```

Error code   Error Description

```
        This error has occured more than 20 times, will not be displayed
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<400>   1
ctcgctcgca gccacgggtc aacccgattg ggatcacccc actggggccc aagcctgata   60

tccgacctcc atgaaatttt ttttttttctt tcgattagca cgcacacaca tcacatagac   120

tgcgtcataa aaatacacta cggaaaaacc ataaagagca aagcgatacc tacttggaag   180

gaaaaggagc acgcttgtaa gggggatggg ggctaagaag tcattcactt tcttttccct   240

tcgcggtccg gacccgggac ccctcctctc cccgcacgat ttcttccttt catatcttcc   300

ttttattcct atcccgttga agcaaccgca ctatgactaa atggtgctgg acatctccat   360

ggctgtgact tgtgtgtatc tcacagtggt aacggcaccg tggctcggaa acggttcctt   420

cgtgacaatt ctagaacagg ggctacagtc tcgataatag aataataagc gcattttttgc   480

tagcgccgcc gcggcgcccg tttcccaata gggaggcgca gtttatcggc ggagctctac   540

ttcttcctat ttgggtaagc ccctttctgt tttcggccag tggttgctgc aggctgcgcc   600

ggagaacata gtgataaggg atgtaacttt cgatgagaga attagcaagc ggaaaaaaac   660

tatggctagc tgggagttgt ttttcaatca tataaaaggg agaaattgtt gctcactatg   720

tgacagtttc tgggacgtct taactttttat tgcagaggac tatcaaatca tacagatatt   780

```
gtcaaaaaaa aaaaagacta ataataaaaa                                          810


<210>  2
<211>  869
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  2
cttgacgggt attctgagca tcttactcag tttcaagatc ttttaatgtc caaaaacatt          60

tgagccgatc taaatacttc tgtgttttca ttaatttata aattgtactc ttttaagaca         120

tggaaagtac caacatcggt tgaaacagtt tttcatttac atatggttta ttggtttttc         180

cagtgaatga ttatttgtcg ttaccctttc gtaaaagttc taacacgttt ttaagtattg         240

tttagttgct cttttcgacat atatgattat ccctgcgcgg ctaaagttaa agatgcaaaa         300

aacgtaagac aactgaagtt aatttacgtc aattaagttt ccagggtaa tgatgttttg          360

ggcttccact aattcaataa gtgtgtcatg aaatacgttg tgaagagcat ccagaaataa         420

tgaaaagaaa caacgaaact gggtcggcct gttgtttctt ttctttacca cgtgatctgc         480

ggcatttaca ggaagtcgct cgttttgcgc agttgttgca acgcagctac ggctaacaaa         540

gcctagtgga actcgactga tgtgttaggg cctaaaactg gtggtgacag ctgaagtgaa         600

ctattcaatc caatcatgtc atggctgtca caaagacctt gcggaccgca cgtacgaaca         660

catacgtatg ctaatatgtg ttttgatagt acccagtgat cgcagacctg caattttttt         720

gtaggtttgg aagaatatat aaaggttgca ctcattcaag atagtttttt tcttgtgtgt         780

ctattcattt tattattgtt tgtttaaatg ttaaaaaaac caagaactta gtttcaaatt         840

aaattcatca cacaaacaaa caaaacaaa                                           869


<210>  3
<211>  957
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  3
gccctgctaa acacgcccta ctaaacactt caaaagcaac ttaaaatatt tttatctaat          60

tatagctaaa acccaatgtg aaagacatat catactgtaa aagtgaaaaa gcagcaccgt         120

tgaacgccgc aagagtgctc ccataacgct ttactagagg gctagatttt aatggcccct         180

tcatggagaa gttatgagga caaatcccac tacagaaagc gcaacaaatt ttttttccg          240

taacaacaaa catctcatct agtttctgcc ttaaacaaag ccgcagccag agccgttttt         300
```

```
ccgccatatt tatccaggat tgttccatac ggctccgtca gaggctgcta cgggatgttt      360

tttttttacc ccgtggaaat gaggggtatg caggaatttg tgcggggtag gaaatctttt      420

tttttttag gaggaacaac tggtggaaga atgcccacac ttctcagaaa tgcatgcagt      480

ggcagcacgc taattcgaaa aaattctcca gaaaggcaac gcaaaatttt ttttccaggg      540

aataaacttt ttatgaccca ctacttctcg taggaacaat ttcgggcccc tgcgtgttct      600

tctgaggttc atcttttaca tttgcttctg ctggataatt ttcagaggca acaaggaaaa      660

attagatggc aaaaagtcgt ctttcaagga aaaatccccca ccatctttcg agatcccctg      720

taacttattg gcaactgaaa gaatgaaaag gaggaaaata caaaatatac tagaactgaa      780

aaaaaaaaag tataaataga gacgatatat gccaatactt cacaatgttc gaatctattc      840

ttcatttgca gctattgtaa aataataaaa catcaagaac aaacaagctc aacttgtctt      900

ttctaagaac aaagaataaa cacaaaaaca aaaagttttt ttaattttaa tcaaaaa        957



<210>  4
<211>  940
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  4
cgctgaatac gtcctgtcaa ttcaaatata tcacgttgtg agcagcccta aagaagaaaa       60

cctcaacagc agtattacta ttacaatcaa acaactttag tgccgcgtga taccgggggt      120

tgaagtgggt gcattgagcc gtattcttct tccccgtaag aaagttgtgt atccttttta      180

ctgcgttgta atagcttctg aaaacctaaa aaatgaacgc tatgtagctc atatccgttt      240

tgcataagta agaataacta cttgtgcagg gtgccgaaag ggatggaaaa ccgctgcagc      300

aacccttgtt acatacagtc ggatccatct gacttacttt ccttgcgtct ccctgcgcga      360

ttttgttggc cattttccag atcctctaga attttttcaag ggtcgagccg taggaggatt      420

ctctcagaag gcaaaaacgc atcgaaagcg tgctttgtaa gaatatttgg tatggctaaa      480

gtaagcaaag ccatatcccg atcccgatcc cgactcttat tccgatccct tccgccacat      540

cctgcatgtt tattcgaata ccaaattagc tcatcttcgt tatttcatca tcccttctg       600

ctatggcaag gacaagtttt tttctagcat ctcatcgaaa actttcctct ccctaattgg      660

ccaaagtttt catattcatc atcagttaga aagtataata tcaatccctt acctcattac      720

aagttgtatc acactaaaaa aatcatatat aagtctgtga gagtcttcaa ttatttagcg      780

taacacctat tcactttcta atcttgtttc ttgtttttac attctgcaat acaacacaac      840
```

```
aacaaatatt aactcaatta ttattattta taattacaaa aacaaaacaa caagtttgag      900

actttaatat cttttgatta ctaaaaacaa caaatttcaa                            940


<210>  5
<211>  800
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  5
cgcatccgaa ttcaatgtag cacctgagat ctcaaatagc ttttggccaa tcctaatctt       60

gaaaacttca tggtttggta aaagctcggg ggtagtttct aactcttttg tataaaccac      120

gatctcgccc ttttggccag acatctgata tgagcgtgcg tgtgagtgac tttacacttg      180

tctatccacg tcctgaagtt gttcgtgttc tttggatatt cgtgttcaag ctaataatga      240

gcctttaagg taatacaatt tataaaccac caccttggcc tcgatctatt gcgcttatgt      300

tgtctattag taatcaagaa aagaaccta aatcatcggc gtccctgtg gggctctcgg      360

aaaaaccggt cctgacgtca ctgaaaagat ttcggcacat ggtcatggga ccagagaaaa      420

attaatccga catgtggaat atttccttcc gttaaggtag tgagcgcgga tttttttctga      480

tttgtaatta tacggggagc tctggccaaa aaggtcagta tttggtgatg aagttgaata      540

tcatcttttg attttcttct gtatcattct ttttcttttt ccacacccct tccggacggt      600

attcacatat tgttgagagg ttaaatgaaa aataaagggg tggaaaatta aggacgagat      660

gtaagggaaa agcataaacg aaacattata taaaggagca caatttcctc tcccttgcca      720

attgtgcata taccgtttct ttataacgaa atttcaacaa accagaacaa cacaagtact      780

accaataacc acaacaaaac                                                  800


<210>  6
<211>  901
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  6
tcgatggaag atgcaacttg caaatgtagt ccggttacca agagacccaa acctcttcca       60

ctttactatt tctcctttga gaaatatatc agtttgcggt aataggtaat atgaaaaagg      120

caataaaaaa aagagatact tgtcaccatc tcgtctccct ttaccttttt tacttaatct      180

tcttcgtcgt catctgttcc atccctttcc tagcttagtc ttctccggct agttcttagt      240

gcggtaagca aaaaaatagc gttttttttc cctcaccagg actttttttg ttaaccgaaa      300

atcggcatct ctagtttttcc tggacaaaaa agacaaaatg gaaataaaca ctcatacgaa      360
```

```
tcagtaaaga tgtaaataat cgcagtaacg actgcacaag gatgtcagaa aaagcagttt      420

aattccagaa gtggttttcc aatttatcac acatgtacat gaagggaaat gtttaaatac      480

ggtcttcgta aaacaaagga tctcttcacc tggtttcttc atttataagt agtgtctttt      540

tcggtaactt aagatatatc cttatttctt tcccacttct cgttatttct cttttttccc      600

ttttcaagtt cttctttttа tttattatta agcttatttt aattcttaga tcgttgtcac      660

tatcttttgt ccttattgtt aagaaacatt gcgaagaaaa agaataataa aagaaactca      720

gaaaaaaaag aagtttcctc gaacaaaaat attattattt caataacttt ttctttctct      780

acatccaatt ttttgaccct attttaacat taatttttg ctttaattttt aactaatacc      840

taatttcact taatatctaa tcatcttcct ttaacccaca gaacaaagaa gaaaaataac      900

a                                                                      901
```

```
<210>   7
<211>   999
<212>   DNA
<213>   Bos taurus


<220>
<221>   CDS
<222>   (1)..(999)
<223>   Lactate Dehydrogenase

<400>   7
atg gca act ctc aag gat cag ctg att cag aat ctt ctt aag gaa gaa        48
Met Ala Thr Leu Lys Asp Gln Leu Ile Gln Asn Leu Leu Lys Glu Glu
1               5                   10                  15

cat gtc ccc cag aat aag att aca att gtt ggg gtt ggt gct gtt ggc        96
His Val Pro Gln Asn Lys Ile Thr Ile Val Gly Val Gly Ala Val Gly
            20                  25                  30

atg gcc tgt gcc atc agt atc tta atg aag gac ttg gca gat gaa gtt       144
Met Ala Cys Ala Ile Ser Ile Leu Met Lys Asp Leu Ala Asp Glu Val
        35                  40                  45

gct ctt gtt gat gtc atg gaa gat aaa ctg aag gga gag atg atg gat       192
Ala Leu Val Asp Val Met Glu Asp Lys Leu Lys Gly Glu Met Met Asp
    50                  55                  60

ctc caa cat ggc agc ctt ttc ctt aga aca cca aaa att gtc tct ggc       240
Leu Gln His Gly Ser Leu Phe Leu Arg Thr Pro Lys Ile Val Ser Gly
65                  70                  75                  80

aaa gac tat aat gtg aca gca aac tcc agg ctg gtt att atc aca gct       288
Lys Asp Tyr Asn Val Thr Ala Asn Ser Arg Leu Val Ile Ile Thr Ala
                85                  90                  95
```

```
ggg gca cgt cag caa gag gga gag agc cgt ctg aat ttg gtc cag cgt        336
Gly Ala Arg Gln Gln Glu Gly Glu Ser Arg Leu Asn Leu Val Gln Arg
            100                 105                 110

aac gtg aac atc ttt aaa ttc atc att cct aat att gta aaa tac agc        384
Asn Val Asn Ile Phe Lys Phe Ile Ile Pro Asn Ile Val Lys Tyr Ser
            115                 120                 125

cca aat tgc aag ttg ctt gtt gtt tcc aat cca gtc gat att ttg acc        432
Pro Asn Cys Lys Leu Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
        130                 135                 140

tat gtg gct tgg aag ata agt ggc ttt ccc aaa aac cgt gtt att gga        480
Tyr Val Ala Trp Lys Ile Ser Gly Phe Pro Lys Asn Arg Val Ile Gly
145                 150                 155                 160

agt ggt tgc aat ctg gat tca gct cgc ttc cgt tat ctc atg ggg gag        528
Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Met Gly Glu
                165                 170                 175

agg ctg gga gtt cac cca tta agc tgc cat ggg tgg atc ctt ggg gag        576
Arg Leu Gly Val His Pro Leu Ser Cys His Gly Trp Ile Leu Gly Glu
            180                 185                 190

cat ggt gac tct agt gtg cct gta tgg agt gga gtg aat gtt gct ggt        624
His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Val Ala Gly
            195                 200                 205

gtc tcc ctg aag aat tta cac cct gaa tta ggc act gat gca gat aag        672
Val Ser Leu Lys Asn Leu His Pro Glu Leu Gly Thr Asp Ala Asp Lys
        210                 215                 220

gaa cag tgg aaa gcg gtt cac aaa caa gtg gtt gac agt gct tat gag        720
Glu Gln Trp Lys Ala Val His Lys Gln Val Val Asp Ser Ala Tyr Glu
225                 230                 235                 240

gtg atc aaa ctg aaa ggc tac aca tcc tgg gcc att gga ctg tca gtg        768
Val Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val
                245                 250                 255

gcc gat ttg gca gaa agt ata atg aag aat ctt agg cgg gtg cat ccg        816
Ala Asp Leu Ala Glu Ser Ile Met Lys Asn Leu Arg Arg Val His Pro
            260                 265                 270

att tcc acc atg att aag ggt ctc tat gga ata aaa gag gat gtc ttc        864
Ile Ser Thr Met Ile Lys Gly Leu Tyr Gly Ile Lys Glu Asp Val Phe
            275                 280                 285

ctt agt gtt cct tgc atc ttg gga cag aat gga atc tca gac gtt gtg        912
Leu Ser Val Pro Cys Ile Leu Gly Gln Asn Gly Ile Ser Asp Val Val
        290                 295                 300

aaa gtg act ctg act cat gaa gaa gag gcc tgt ttg aag aag agt gca        960
Lys Val Thr Leu Thr His Glu Glu Glu Ala Cys Leu Lys Lys Ser Ala
305                 310                 315                 320
```

```
gat aca ctt tgg ggg atc cag aaa gaa ctg cag ttt taa                    999
Asp Thr Leu Trp Gly Ile Gln Lys Glu Leu Gln Phe
            325                 330


<210>   8
<211>   332
<212>   PRT
<213>   Bos taurus

<400>   8

Met Ala Thr Leu Lys Asp Gln Leu Ile Gln Asn Leu Leu Lys Glu Glu
1               5                   10                  15


His Val Pro Gln Asn Lys Ile Thr Ile Val Gly Val Gly Ala Val Gly
            20                  25                  30


Met Ala Cys Ala Ile Ser Ile Leu Met Lys Asp Leu Ala Asp Glu Val
            35                  40                  45


Ala Leu Val Asp Val Met Glu Asp Lys Leu Lys Gly Glu Met Met Asp
        50                  55                  60


Leu Gln His Gly Ser Leu Phe Leu Arg Thr Pro Lys Ile Val Ser Gly
65                  70                  75                  80


Lys Asp Tyr Asn Val Thr Ala Asn Ser Arg Leu Val Ile Ile Thr Ala
                85                  90                  95


Gly Ala Arg Gln Gln Glu Gly Glu Ser Arg Leu Asn Leu Val Gln Arg
            100                 105                 110


Asn Val Asn Ile Phe Lys Phe Ile Ile Pro Asn Ile Val Lys Tyr Ser
            115                 120                 125


Pro Asn Cys Lys Leu Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
    130                 135                 140


Tyr Val Ala Trp Lys Ile Ser Gly Phe Pro Lys Asn Arg Val Ile Gly
145                 150                 155                 160


Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Met Gly Glu
                165                 170                 175


Arg Leu Gly Val His Pro Leu Ser Cys His Gly Trp Ile Leu Gly Glu
```

```
                180                     185                     190


His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Val Ala Gly
       195                 200                 205


Val Ser Leu Lys Asn Leu His Pro Glu Leu Gly Thr Asp Ala Asp Lys
       210                 215                 220


Glu Gln Trp Lys Ala Val His Lys Gln Val Val Asp Ser Ala Tyr Glu
225                 230                 235                 240


Val Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val
                245                 250                 255


Ala Asp Leu Ala Glu Ser Ile Met Lys Asn Leu Arg Arg Val His Pro
                260                 265                 270


Ile Ser Thr Met Ile Lys Gly Leu Tyr Gly Ile Lys Glu Asp Val Phe
          275                 280                 285


Leu Ser Val Pro Cys Ile Leu Gly Gln Asn Gly Ile Ser Asp Val Val
       290                 295                 300


Lys Val Thr Leu Thr His Glu Glu Glu Ala Cys Leu Lys Lys Ser Ala
305                 310                 315                 320


Asp Thr Leu Trp Gly Ile Gln Lys Glu Leu Gln Phe
                325                 330



<210>   9
<211>   971
<212>   DNA
<213>   Saccharomyces cerevisiae

<400>   9
aagggtagcc tccccataac ataaactcaa taaaatatat agtcttcaac ttgaaaaagg      60

aacaagctca tgcaaagagg tggtacccgc acgccgaaat gcatgcaagt aacctattca     120

aagtaatatc tcatacatgt ttcatgaggg taacaacatg cgactgggtg agcatatgct     180

ccgctgatgt gatgtgcaag ataaacaagc aagacggaaa ctaacttctt cttcatgtaa     240

taaacacacc ccgcgtttat ttacctatct ttaaacttca acaccttata tcataactaa     300

tatttcttga gataagcaca ctgcacccat accttcctta aaagcgtagc ttccagtttt     360
```

```
tggtggttcc ggcttccttc ccgattccgc ccgctaaacg catatttttg ttgcctggtg        420

gcatttgcaa aatgcataac ctatgcattt aaaagattat gtatgctctt ctgacttttc        480

gtgtgatgaa gctcgtggaa aaaatgaata atttatgaat ttgagaacaa ttctgtgttg        540

ttacggtatt ttactatgga ataattaatc aattgaggat tttatgcaaa tatcgtttga        600

atattttcc gaccctttga gtacttttct tcataattgc ataatattgt ccgctgcccg         660

tttttctgtt agacggtgtc ttgatctact tgctatcgtt caacaccacc ttattttcta        720

actatttttt ttttagctca tttgaatcag cttatggtga tggcacattt ttgcataaac        780

ctagctgtcc tcgttgaaca taggaaaaaa aaatatatta acaaggctct ttcactctcc        840

ttgcaatcag atttgggttt gttcccttta ttttcatatt tcttgtcata ttcctttctc        900

aattattatt ttctactcat aaccacacgc aaaataacac agtcaaatca atcaaagatc        960

ccccaattct c                                                             971


<210>  10
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  Synthetic primer

<400>  10
cgtcgccttc actggtttag                                                    20


<210>  11
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  Synthetic primer

<400>  11
caaaaaggcc aaagcaccag                                                    20


<210>  12
<211>  21
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  Synthetic primer

<400>  12
caaggtaagt tgaccggtat g                                                  21
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<210>   13
<211>   22
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   Synthetic primer

<400>   13
gatggaagag ttagagtcac cc   22

<210>   14
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   Synthetic primer

<400>   14
tcatgggctg tttggtcttc